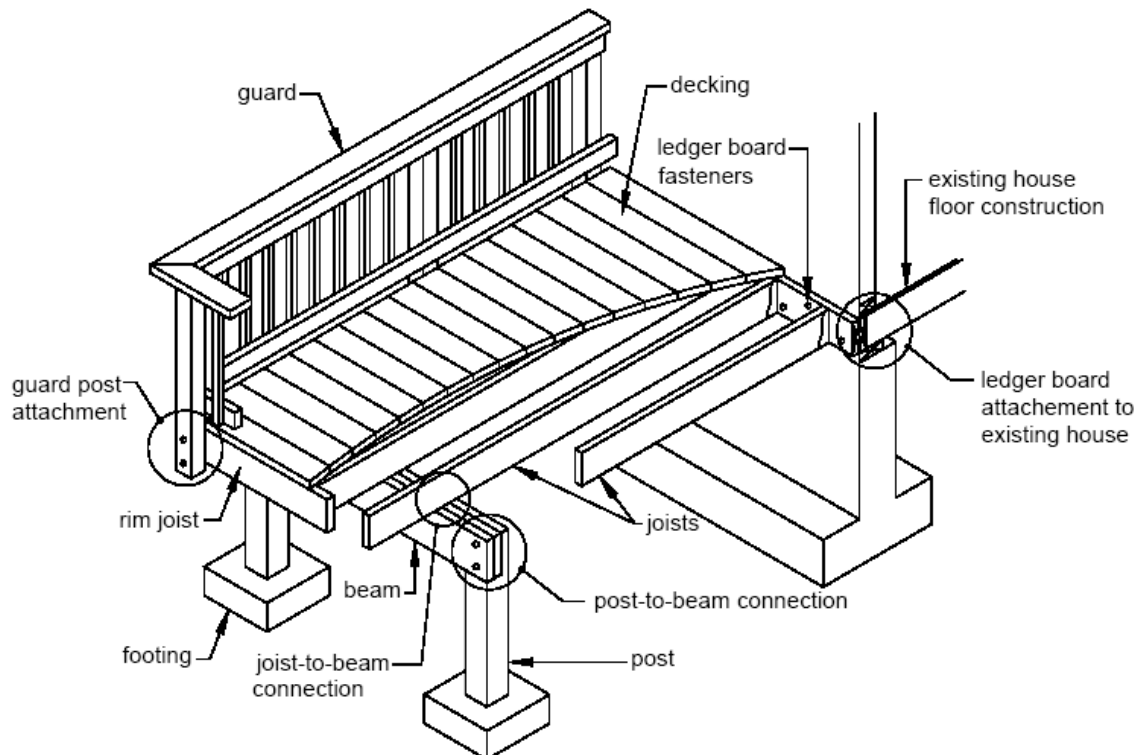




Town of Herndon Typical Deck Details

Based on the 2006 Virginia Uniform Statewide Building Code



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Typical Deck Details
Based on the 2006 Virginia Uniform Statewide Building Code
Updated – March 30, 2011

General Notes

1. All lumber shall be southern pine, grade #2 or better and shall be pressure treated ACQ or CA-B in accordance with American Wood-Preserver' Association standards. All lumber in contact with the ground shall be rated as "ground-contact."
2. **R319.1.1** Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated in the field in accordance with AWP4 M4.
3. All nails shall be spiral or annular grooved.
4. Chemicals used in pressure treatment methods will prematurely corrode standard fasteners, hardware, and flashing when in contact with the lumber. To combat corrosion, the following is required:
 - All screws and nails shall be hot-dipped galvanized or stainless steel.
 - All hardware (joist hangers, cast-in-place post anchors, etc.) shall be galvanized with 1.85 oz/sf of zinc (G-185 coating) or shall be stainless steel. Look for products such as "Zmax" from Simpson Strong-Tie or "Triple Zinc" from USP.
5. Decks constructed according to this handout are not approved for future hot tub installation.
6. Inspections:
 - A footing, framing, and final inspection are required on all decks.
 - Footing inspections are required prior to the placement of concrete.
 - Framing and final inspections may be combined if all portions of the deck framing and mechanical attachments are at least 42" above grade.
 - Inspections are required by law. Failure to receive any and all inspections can result in the issuance of violations which may lead to legal proceedings.
7. It is the responsibility of the permit holder or the permit holder's representative to notify the Town when the stages of construction are reached that require an inspection. Inspection requests may be made by calling the Building Inspections Department at (703) 435-6850 the day before you require an inspection between the hours of 8:00am to 4:30pm.
8. Decks shall not be used or occupied until a final inspection approval is obtained.

Decking Requirements

All decking material shall be composed of 2x6 or 5/4 ("five-quarter") board. Attach decking to each joist with 2-8d nails or 2-#8 screws. See FIGURE 10 for decking connection requirements at the rim joist. Decking may be placed from an angle perpendicular to the joists to an angle of 45 degrees to the joists. Each piece of decking must bear on a minimum of 4 joists.

Decking composed of foreign lumber, plastic or manufactured materials may be substituted only when the product has an approved evaluation report from an accredited testing laboratory which has listed the product. The evaluation report must be on the jobsite and available to the inspector during the inspection process. Installation and span lengths of the substituted material must be in strict conformance with the evaluation report and the manufacturer's instructions. All decking products must be capable of supporting a live load of 40 pounds per square foot.

JOIST SIZE

The span of a joist is measured from the centerline of bearing at one end of the joist to the centerline of bearing at the other and does not include the length of the overhangs. Joists may overhang up to one-fourth of the actual joist span, L_J . See **FIGURE 1** through **FIGURE 3** for joist span types. Use **TABLE 1** to determine your joist size based on span length and joist spacing.

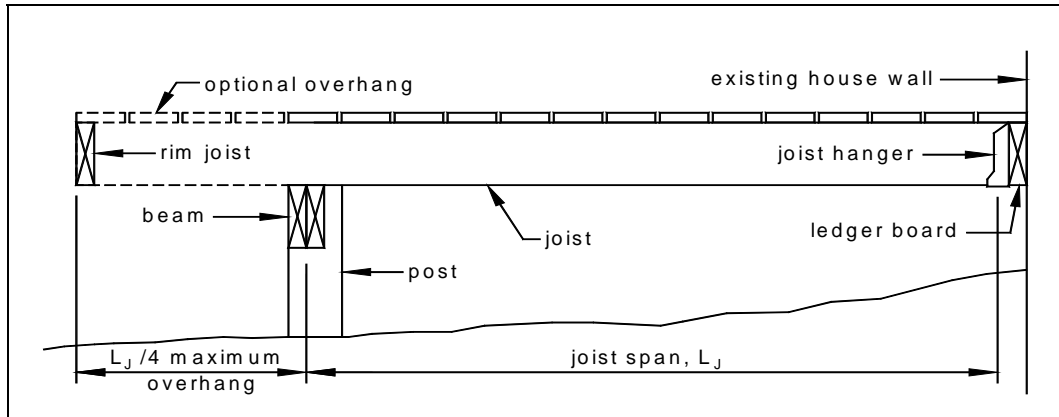


FIGURE 1: JOIST SPAN - DECK ATTACHED AT HOUSE

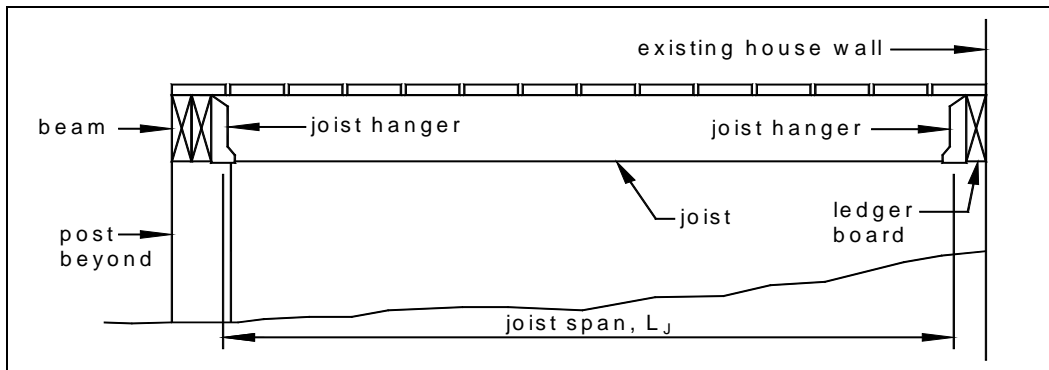


FIGURE 2: JOIST SPAN - JOISTS ATTACHED TO SIDE OF BEAM

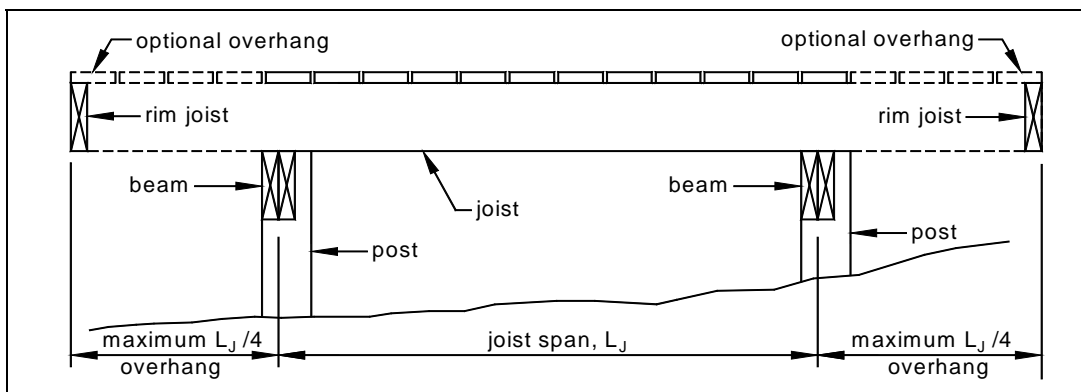


FIGURE 3: JOIST SPAN - FREE-STANDING DECK

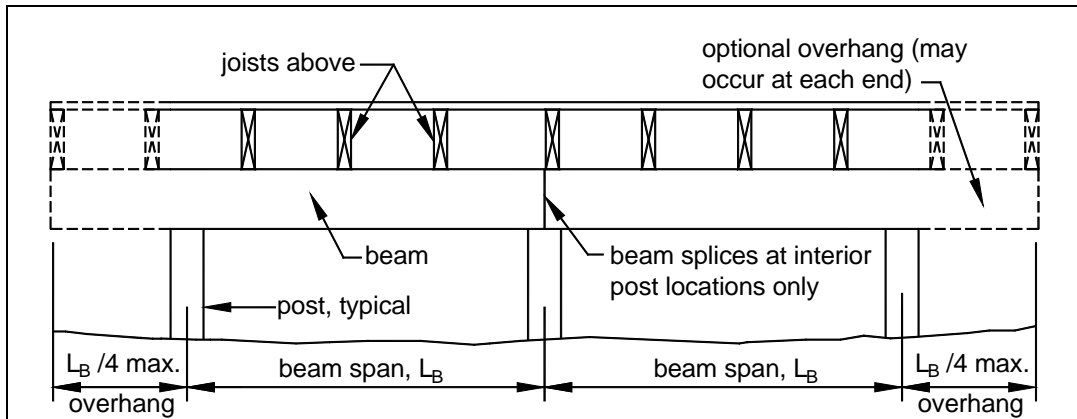
TABLE 1: MAXIMUM JOIST SPAN LENGTH, J¹

Joist Size	Joists without Overhangs			Joists with Overhangs		
	joist spacing, on center			joist spacing, on center		
	12"	16"	24"	12"	16"	24"
2x8	13'-8"	12'-5"	10'-2"	10'-6"	10'-6"	10'-2"
2x10	17'-5"	15'-10"	13'-1"	15'-2"	15'-2"	13'-1"
2x12	18'-0"	18'-0"	15'-5"	18'-0"	18'-0"	15'-5"

Spans are based on 40 PSF live load, 10 PSF dead load, southern pine#2, normal loading duration, wet service conditions and deflection: $\Delta = \ell/360$ for main span and $\ell/180$ for overhang

Beam Size & Assembly Requirements

Beam size is determined using **TABLE 2**. Beams may overhang up to one-fourth of the actual beam span, B, as shown in **FIGURE 4**.

**FIGURE 4: BEAM SPAN TYPES****TABLE 2: MAXIMUM BEAM SPAN LENGTH, L_B¹**

Joist Span	Beam Size							
	(2)2x6	(2)2x8	(2)2x10	(2)2x12	(3)2x6	(3)2x8	(3)2x10	(3)2x12
0 - 6'-0"	7'-1"	9'-2"	11'-10"	13'-11"	8'-7"	11'-4"	14'-5"	17'-5"
6'-1" - 8'-0"	6'-2"	7'-11"	10'-3"	12'-0"	7'-8"	9'-11"	12'-10"	15'-1"
8'-1" - 10'-0"	5'-6"	7'-1"	9'-2"	10'-9"	6'-11"	8'-11"	11'-6"	13'-6"
10'-1" - 12'-0"	5'-0"	6'-6"	8'-5"	9'-10"	6'-3"	8'-1"	10'-6"	12'-4"
12'-1" - 14'-0"	4'-8"	6'-0"	7'-9"	9'-1"	5'-10"	7'-6"	9'-9"	11'-5"
14'-1" - 16'-0"	4'-4"	6'-0"	7'-9"	9'-1"	5'-10"	7'-6"	9'-9"	11'-5"
16'-1" - 18'-0"	4'-1"	5'-3"	6'-10"	8'-0"	5'-2"	6'-7"	8'-7"	10'-1"

¹Spans are based on 40 PSF live load, 10 PSF dead load, southern pine#2, normal loading duration, wet service conditions and deflection: $\Delta = \ell/360$ for main span and $\ell/180$ for overhang with a 230 lb point load

The deck's beam is assembled by attaching the two members identified in the tables above in accordance with **FIGURE 5**.

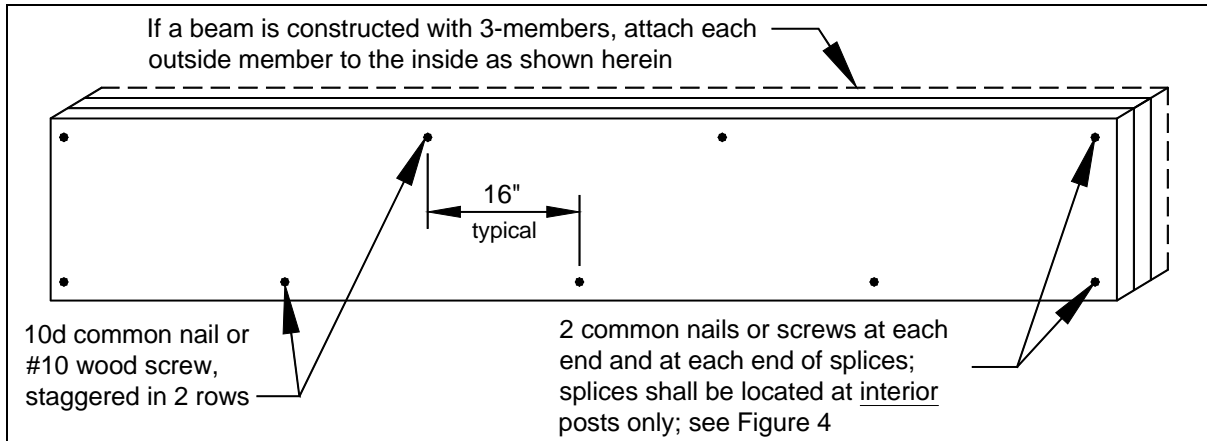


FIGURE 5: BEAM ASSEMBLY DETAIL

Deck Framing Plan

A framing plan shows a bird's-eye view of the joist and beam layout; the location of the ledger board, posts and footings, and the type, size and spacing of the ledger board fasteners. See **FIGURE 6** for an example of a typical deck framing plan.

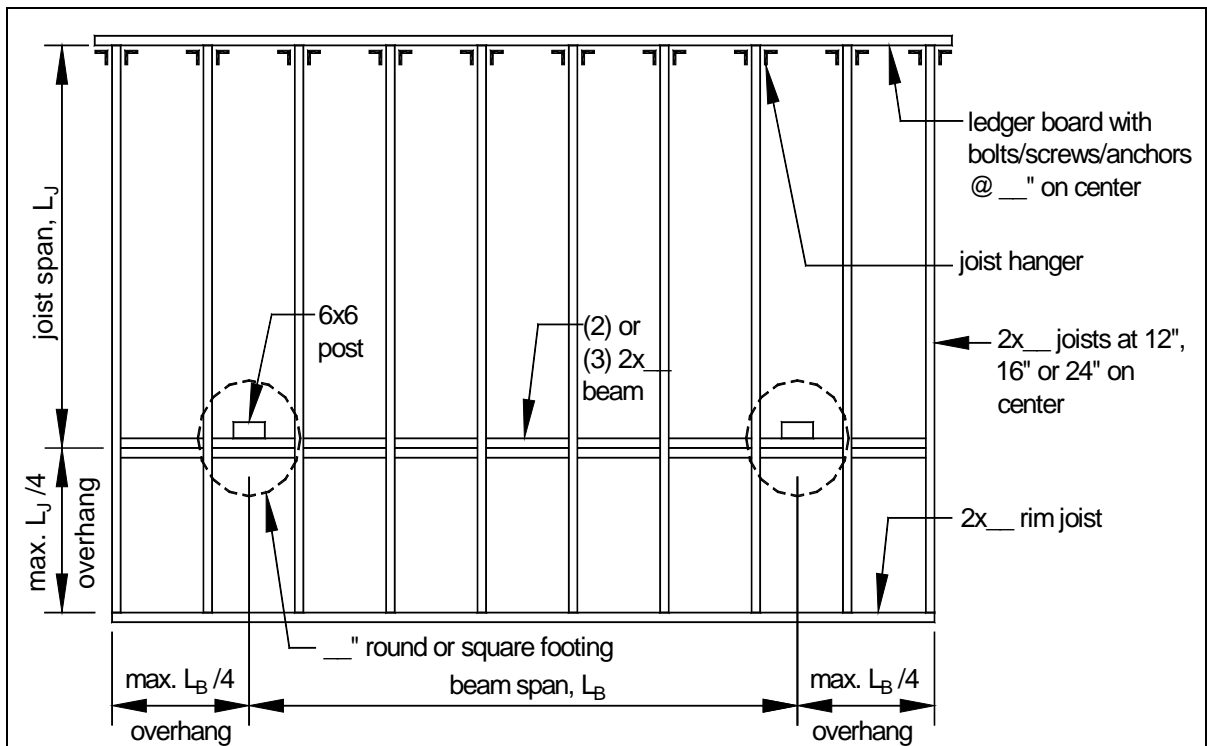


FIGURE 6: TYPICAL DECK FRAMING PLAN

Joist-To-Beam-Connection

Each joist shall be attached to the beam as shown in **FIGURE 6**. Joists may bear on and overhang past the beam up to One fourth of the actual joist span. Use Option 1 or Option 2 to attach the joist to the beam. Joists may also attach to the side of the beam with joist hangers. See JOIST HANGERS on Page 6 for more information. Hangers, clips and mechanical fasteners shall be galvanized with 1.85 oz/sf of zinc (G-185 coating) or shall be stainless steel.

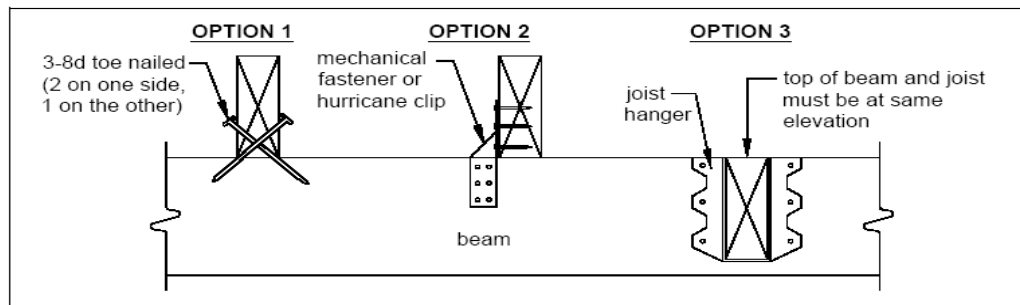


FIGURE 6: JOIST-TO-BEAM DETAIL

Joist Hangers

Joist hangers, as shown in **FIGURE 7**, shall each have a minimum capacity of 1000 lbs. The depth and width of the joist hanger shall equal the dimensions of the joist or header it is carrying. Joist hangers shall be galvanized with 1.85 oz/sf of zinc (G-185 coating) or stainless steel.

Use joist hangers with inside flanges when clearances to the edge of the beam or ledger board dictate. **Do not use clip angles or brackets to support framing members. Do not bend hanger flanges to accommodate field conditions.**

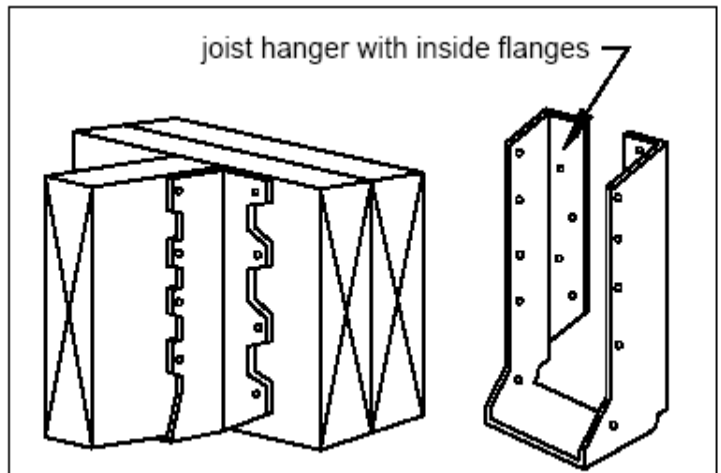


FIGURE 7: TYPICAL JOIST HANGERS

Post Requirements

All deck post sizes shall be 6x6, and the maximum height shall be 14'-0". The beam shall be attached to the post by notching the 6x6 as shown in FIGURE 10. All thru-bolts shall have washers at the bolt head and nut. Attachment of the beam to the side of the post without notching is prohibited; see FIGURE 9.

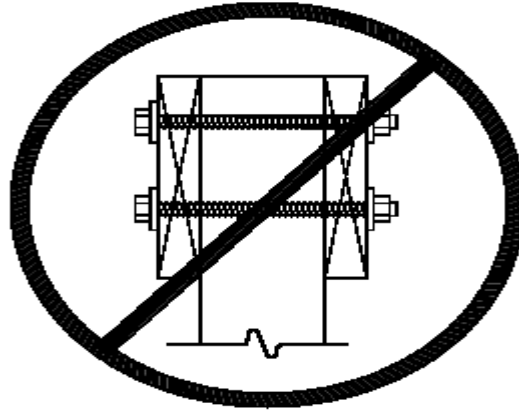


FIGURE 9: PROHIBITED POST-TO-BEAM ATTACHMENT CONDITION

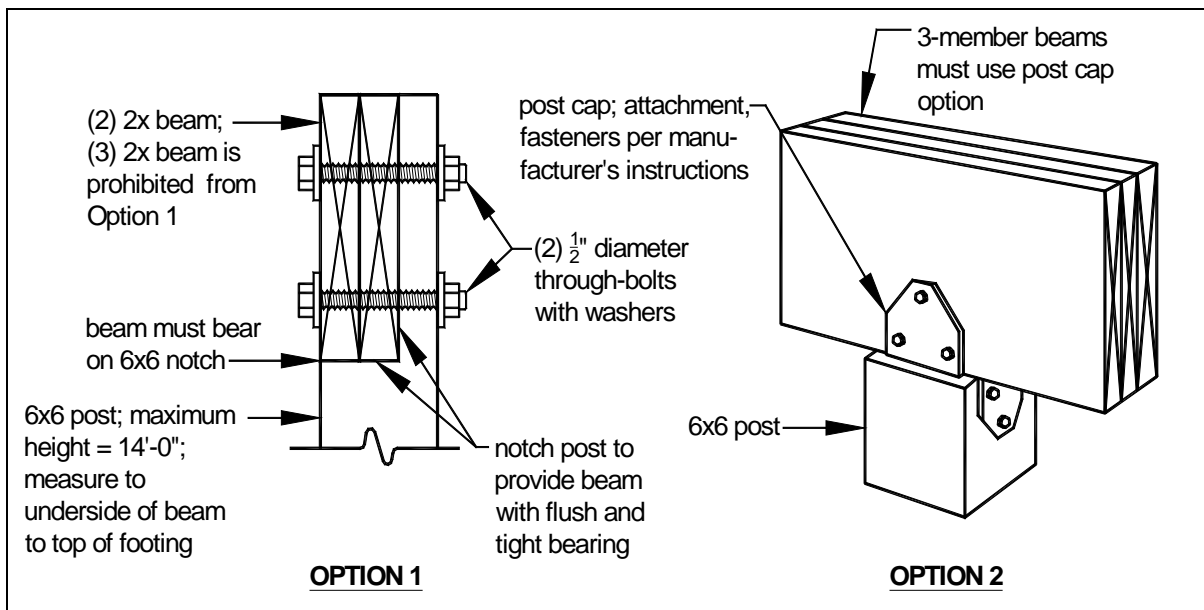


FIGURE 10: POST-TO-BEAM CONNECTION OPTIONS

Rim Joist Requirements

Attach a continuous rim joist to the ends of joists as shown in **FIGURE 11**. Attach decking to the rim joist as shown in **FIGURE 11**. For more decking attachment requirements, see DECKING REQUIREMENTS on Page 2.

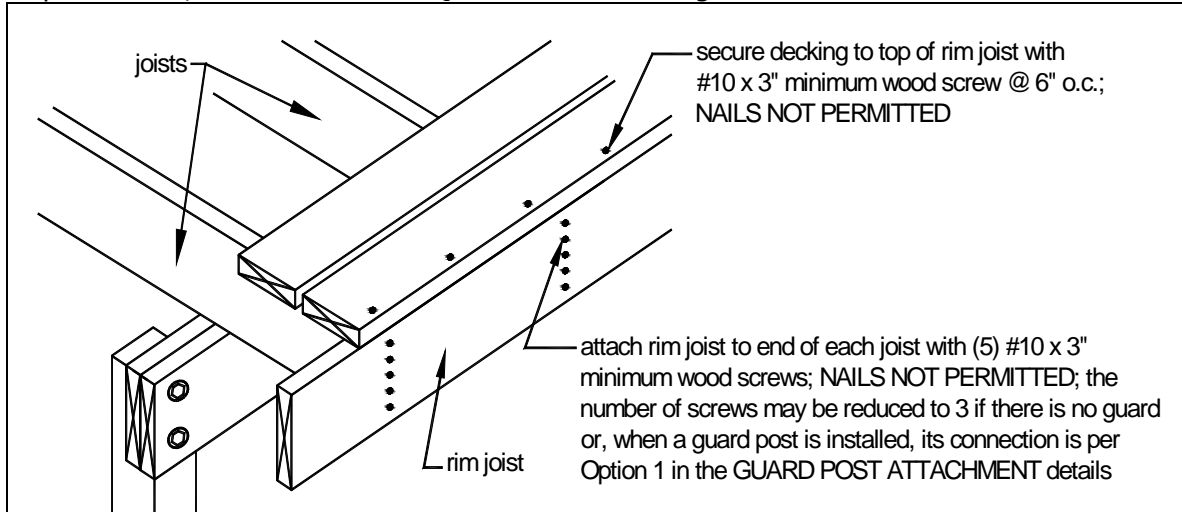


FIGURE 11: RIM JOIST CONNECTION DETAILS

Footings

See **FIGURE 12** for footing size, footing thickness and post attachment options and requirements. All footings shall bear on solid ground; bearing conditions shall be verified in the field by Town inspectors prior to placement of concrete. DECK FOOTINGS CLOSER THAN 5'-0" TO AN EXISTING EXTERIOR HOUSE WALL MUST BEAR AT THE SAME ELEVATION AS THE FOOTING OF THE EXISTING HOUSE FOUNDATION.

Do not construct footings over utility lines or enclosed meters. Call Miss Utility at 1-800-552-7001 before you dig.

TABLE 3: FOOTING SIZE

Beam Span, L_B	Joist Span, L_J	Footing Size		Minimum Thickness*
		Square	Round	
0 - 8'-0"	0 - 10'-0"	16"	18"	8"
	10'-1" - 14'-0"	16"	18"	8"
	14'-1" - 18'-0"	18"	20"	10"
8'-1" - 12'-0"	0 - 10'-0"	16"	18"	8"
	10'-1" - 14'-0"	22"	24"	10"
	14'-1" - 18'-0"	22"	24"	10"
12'-1" - 17'-5"	0 - 10'-0"	22"	24"	10"
	10'-1" - 14'-0"	24"	26"	12"

The pre-manufactured post base may have a footing thickness requirement greater than the value in the table above due to the dimension of the cast-in-place anchor.

In such cases, the manufacturer's specified minimum footing thickness shall govern

Pre-manufactured post anchors shall be galvanized with 1.85 oz/sf of zinc (G-185 coating) or shall be stainless steel.

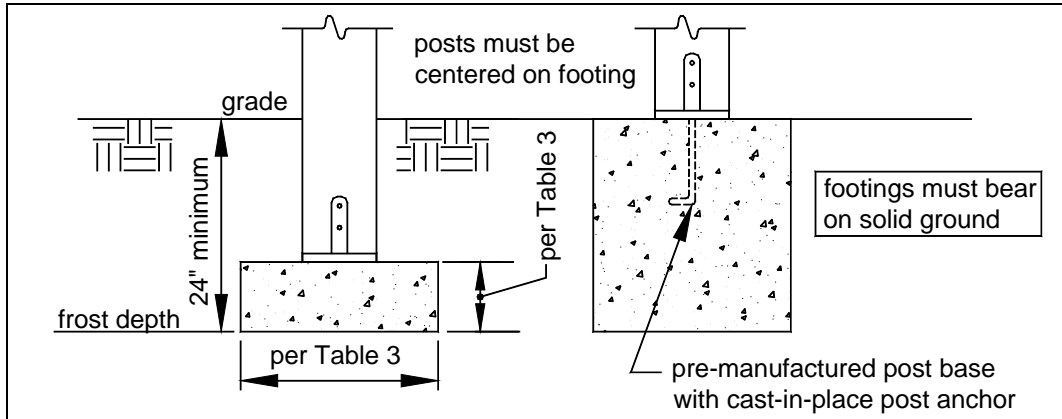


FIGURE 7: TYPICAL FOOTING OPTIONS

Ledger Attachment Requirements

GENERAL: Attach the ledger board, which shall be equal to or greater than the joists size, to the existing exterior wall in accordance with **FIGURE 13** through **FIGURE 15**. When attachments are made to the existing house band board, the band board shall be capable of supporting the new deck. If this cannot be verified or conditions at the existing house differ from the details herein, then a free-standing deck is required. See **FREE-STANDING DECKS** on Page 13.

YOU MUST VERIFY THE EXISTING CONDITIONS IN THE FIELD PRIOR TO APPLYING FOR A BUILDING PERMIT. COMPLIANCE WITH ALL THE REQUIREMENTS HEREIN IS CRITICAL TO ENSURE THE STRUCTURAL STABILITY OF YOUR DECK AND THE SAFETY OF YOU AND YOUR FAMILY.

SIDING AND FLASHING: House siding, or the exterior finish system, must be removed prior to the installation of the ledger board. Flashing is required at any ledger board connection to a wall of wood framed construction and shall be composed of copper (attached using copper nails), stainless steel, UV resistant plastic or galvanized steel coated with 1.85 oz/sf of zinc (G-185 coating). See **FIGURE 13** for continuous flashing with drip edge.

MANUFACTURED WOOD JOIST: The term "MWJ" denotes manufactured wood "I" joists; see **FIGURE 13**. Examples of manufactured wood joists are TJI, GPI, and LPI.

Many new homes constructed with MWJs include a 1- 1/4" manufactured solid band board that can support the attachment of a deck; see **FIGURE 14**. However, older homes constructed with MWJs may only include a plywood band board which cannot support a deck. In such cases a free-standing deck or a full plan submission is required.

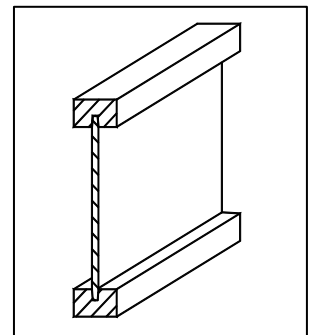


FIGURE 8: WOOD I-JOIST PROFILE

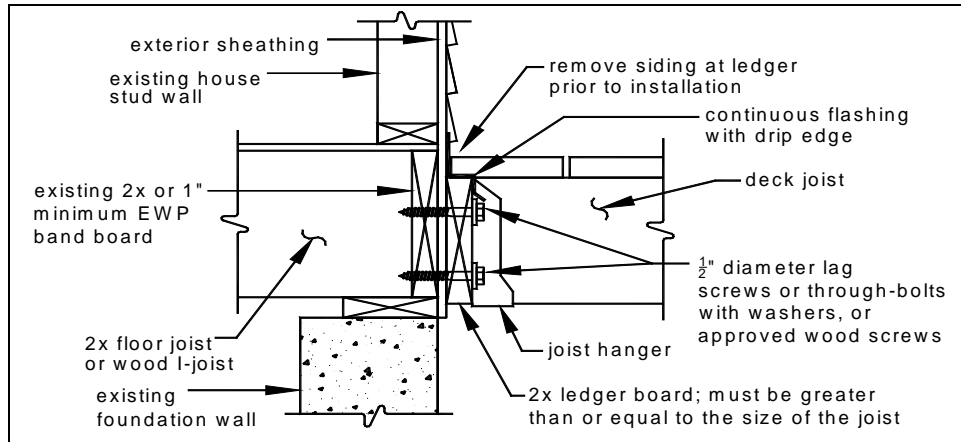


FIGURE 9: ATTACHMENT OF LEDGER BOARD-TO-BAND BOARD

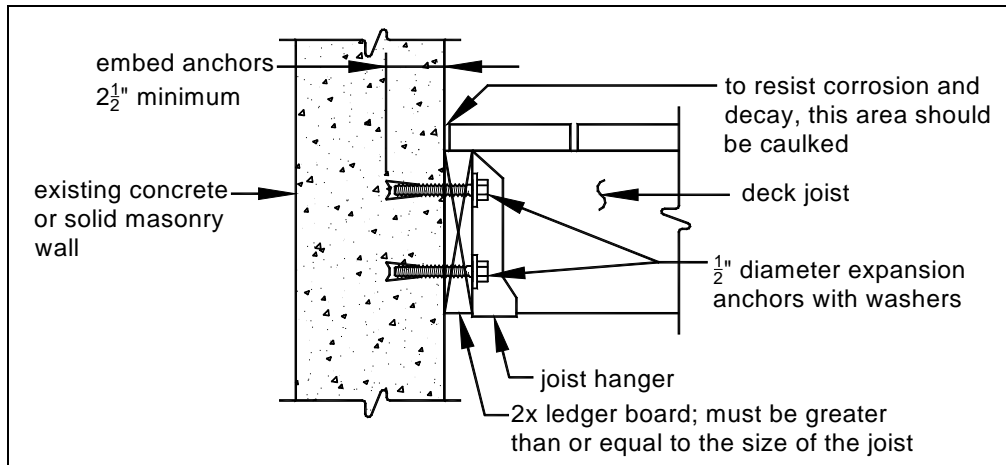


FIGURE 10: ATTACHMENT OF LEDGER BOARD-TO-FOUNDATION WALL (CONCRETE OR SOLID MASONRY)

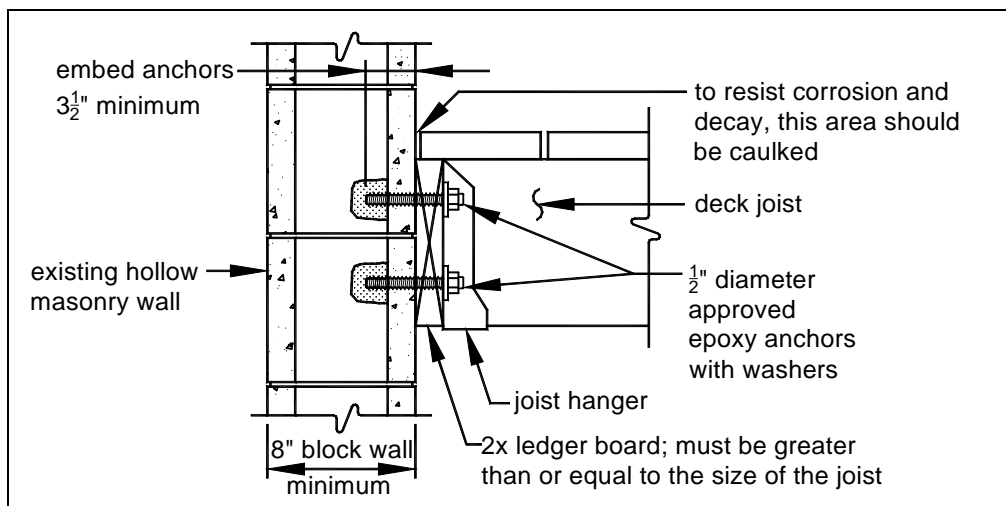


FIGURE 11: ATTACHMENT OF LEDGER BOARD-TO-FOUNDATION WALL (HOLLOW MASONRY)

Prohibited Ledger Attachments

Attachments to the ends of pre-manufactured open web joists, to brick veneers, and to house overhangs or bay windows are strictly prohibited; see **FIGURE 17** through **FIGURE 18**. In such cases the deck shall be free-standing. See FREE-STANDING DECKS on Page 22.

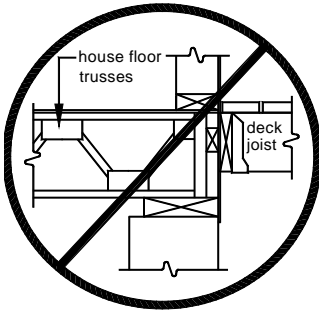


FIG 12: NO ATTACHMENT TO OPEN WEB TRUSSES

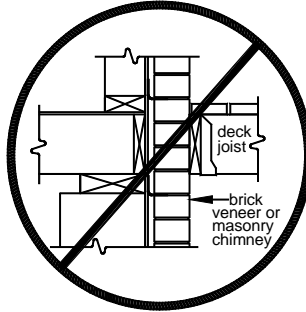


FIG 13: NO ATTACHMENT TO OR THROUGH BRICK VENEER

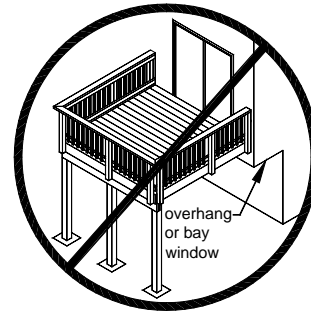


FIG 14: NO ATTACHMENT TO HOUSE OVERHANG

Ledger Board Fasteners

The spacing between ledger board fasteners is dependent on the span length of the joists. Use **TABLE 4** to determine fastener spacing and install in the configuration shown in **FIGURE 19**. All fasteners shall be installed with washers and must be thoroughly tightened. Adequacy of connections will be verified by Town inspectors. If a ladder is required to access the ledger board, one must be provided by the property owner, permit holder, or their representative.

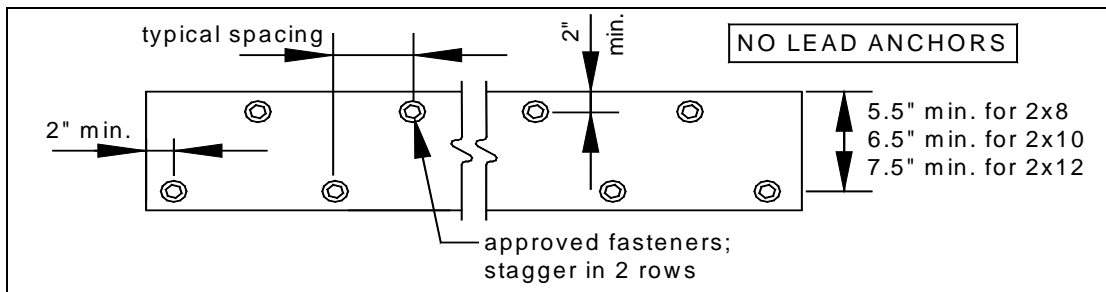


FIGURE 15: LEDGER BOARD FASTENER SPACING AND CLEARANCES

TABLE 4: LEDGER BOARD FASTENER SPACING¹

Fastener	Band Board Material ²	Joist Span						
		0 to 6'-0"	6'-1" to 8'-0"	8'-1" to 10'-0"	10'-1" to 12'-0"	12'-1" to 14'-0"	14'-1" to 16'-0"	16'-1" to 18'-0"
		Spacing of Fasteners, on center						
Lag Screws	1" EWP	24"	18"	14"	12"	10"	9"	8"
	1-1/8" EWP	28"	21"	16"	14"	12"	10"	9"
	2x lumber	30"	23"	18"	15"	13"	11"	10"
Through Bolts	1" EWP	24"	18"	14"	12"	10"	9"	8"
	1-1/8" EWP	28"	21"	16"	14"	12"	10"	9"
	2x lumber	36"	36"	34"	29"	24"	21"	19"
Approved Wood Screws	1" EWP	18"	13"	11"	9"	8"	7"	6"
	1-1/8" EWP	21"	15"	12"	10"	9"	7"	7"
	2x lumber	19"	14"	11"	9"	8"	7"	6"
Expansion Anchors		36"	36"	34"	29"	24"	21"	19"
Approved Epoxy Anchors		32"	32"	32"	24"	24"	16"	16"

Thru-Bolts

Thru-bolts shall have a minimum diameter of $\frac{1}{2}$ ". Pilot holes for thru-bolts shall be $\frac{17}{32}$ " to $\frac{9}{16}$ " in diameter. Thru-bolts must be equipped with washers at the bolt head and nut.

Expansion Anchors

Use expansion anchors when attaching a ledger board to a concrete or solid masonry wall as shown in **FIGURE 15**. Bolt diameters of the anchors shall be a minimum of $\frac{1}{2}$ "; in some cases, this may require an anchor size of $\frac{5}{8}$ ". Minimum embedment length shall be 2- $\frac{1}{2}$ ". Expansion anchors must have washers.

Lag Screws

Lag screws shall have a minimum diameter of $\frac{1}{2}$ " and shall be hot-dipped galvanized or stainless steel. Lag screws may be used only when the field conditions match those shown in **FIGURE 14**. **You must verify the existing conditions in the field prior to applying for a building permit and installing lag screws. Compliance with all the requirements herein is critical to ensure the structural stability of your deck.** See **FIGURE 21** for lag screw length and shank requirements. All lag screws shall be installed with washers.

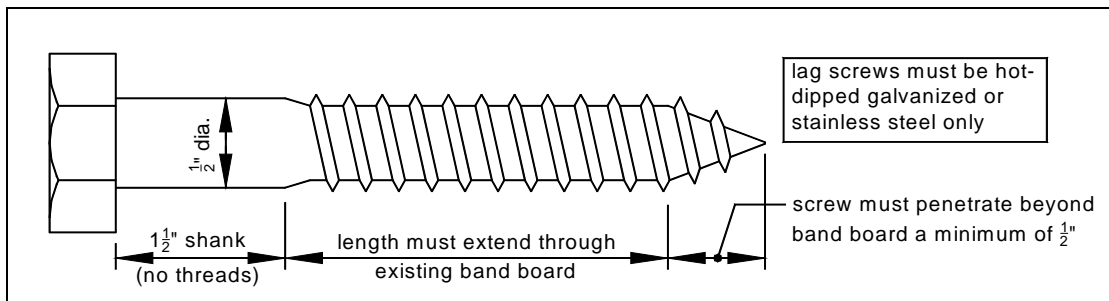


FIGURE 16: LAG SCREW REQUIREMENTS

Lag screw installation requirements: Each lag screw shall have pilot holes drilled as follows: 1) Drill a $\frac{1}{2}$ " diameter hole in the ledger board, 2) Drill a $\frac{5}{16}$ " diameter hole into the solid connection material of the existing house. **DO NOT DRILL A $\frac{1}{2}$ " DIAMETER HOLE INTO THE SOLID CONNECTION MATERIAL.**

The threaded portion of the lag screw shall be inserted into the pilot hole by turning. **DO NOT DRIVE WITH A HAMMER.** Use soap or a wood-compatible lubricant as required to facilitate tightening. Each lag screw shall be thoroughly tightened.

LedgerLok

LedgerLok by FastenMaster, a proprietary fastener listed by ICC-ES, is similar to a lag screw. LedgerLoks have a diameter less than $\frac{1}{4}$ " and an integrated washer. No pilot hole is required for installation. LedgerLoks shall be of sufficient length to fully penetrate the existing house band board and shall be installed in strict conformance with the manufacturer's instructions.

FRAMING AT CHIMNEY OR BAY WINDOW

All members at a chimney or bay window shall be framed in accordance with **FIGURE**. Headers may span a maximum of 6'-0". When a chimney or bay window is wider than 6'-0", one or more 6x6 posts may be added to reduce header spans to less than 6'-0". In such cases, the post footing must meet the requirements on Sheet 8. Headers with a span length greater than 6'-0" require a plan submission.

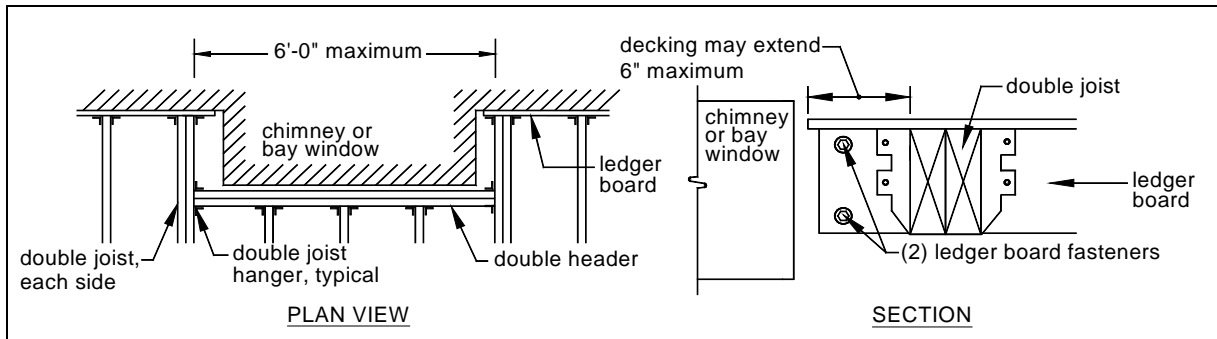


FIGURE 22: REQUIREMENTS FOR FRAMING AT CHIMNEY OR BAY WINDOW

Free-Standing Decks

Decks which are free-standing do not utilize the exterior wall of the existing house to support vertical loads; instead, an additional beam with posts is provided at or within 3'-0" of the existing house. THE ASSOCIATED DECK POST FOOTINGS SHALL BE PLACED AT THE SAME ELEVATION AS THE EXISTING HOUSE FOOTING.

See **FIGURE 3** and **FIGURE 23**. Beam size is determined by **TABLE 2**.

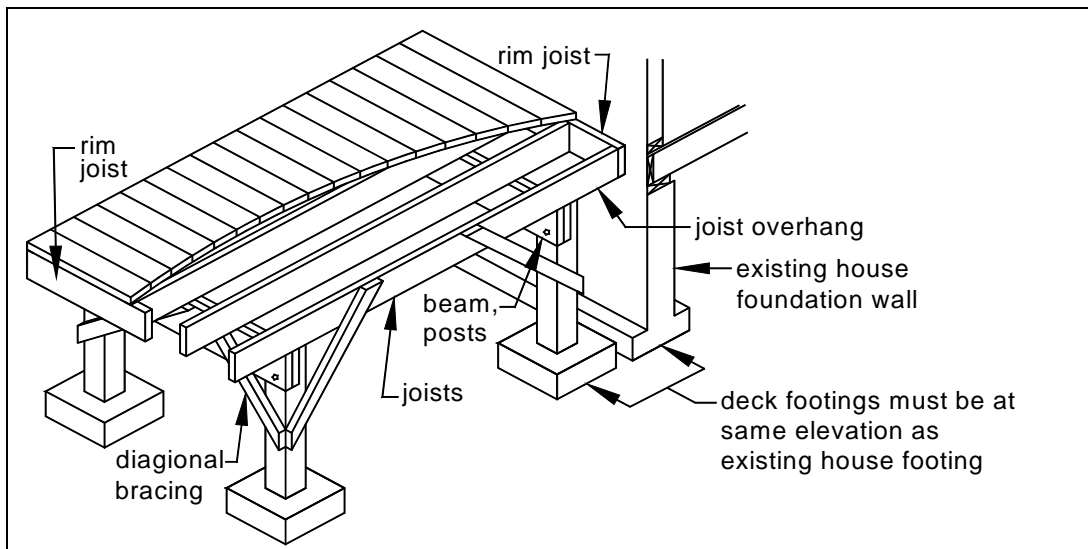


FIGURE 23: FREE-STANDING DECK

Lateral Support of Free-Standing Decks

Free standing decks greater than 2 feet above grade shall resist lateral loading and horizontal movement by providing diagonal bracing or by attaching to the exterior wall of the house.

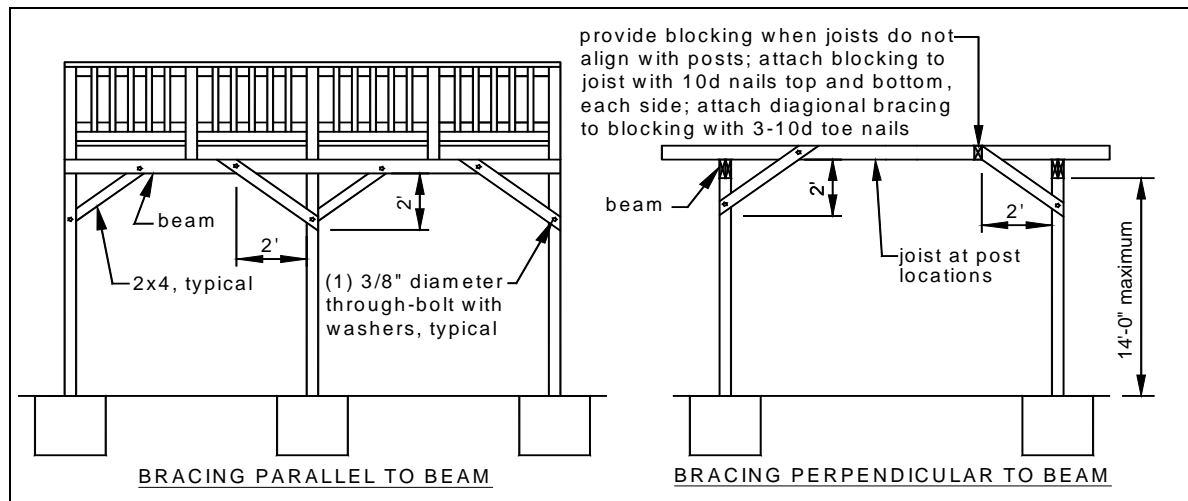


FIGURE 24: DIAGONAL BRACING REQUIREMENTS

Diagonal Bracing: Provide diagonal bracing both parallel and perpendicular to the beam at each post as shown in **FIGURE 24**. When parallel to the beam, the bracing shall be bolted to the post at one end and beam at the other. When perpendicular to the beam, the bracing shall be bolted to the post at one end and a joist at the other. When a joist does not align with the bracing location, provide blocking between the next adjacent joists.

Attachment To House: Attach the deck rim joist to the existing house exterior wall as shown in **FIGURE 25**. The wall must be sheathed with a minimum 3/8" structural panel sheathing. Use lag screws or thru-bolts when fastening to an existing band board or wall stud; use expansion anchors or epoxy anchors when fastening to concrete or masonry. **DO NOT ATTACH TO BRICK VENEERS. YOU MUST VERIFY THIS CONDITION IN THE FIELD PRIOR TO UTILIZING THIS METHOD.** Fasteners shall be 16" on center and staggered in 2 rows. Flashing over the rim joist is required and must be installed in accordance with the flashing provisions on Page 9.

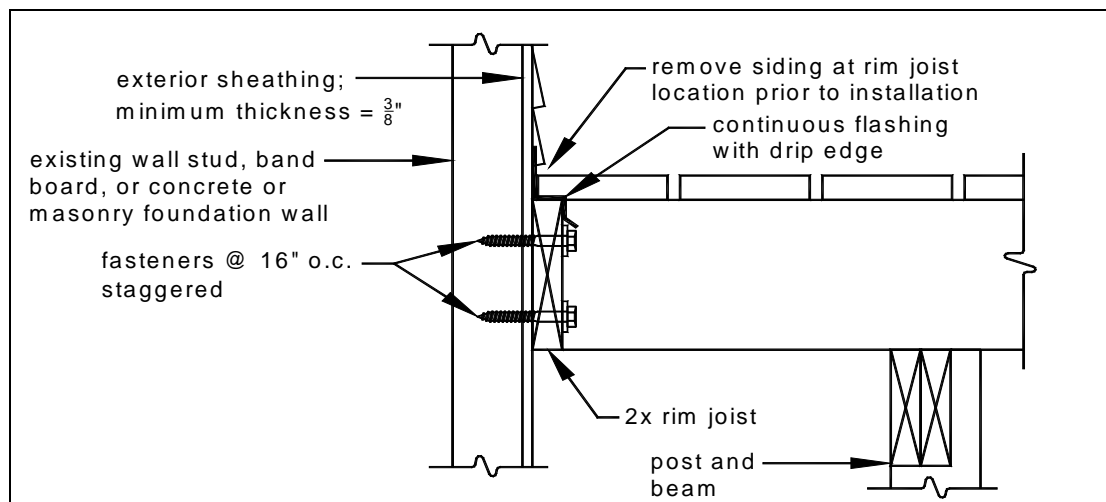


FIGURE 25: ATTACHMENT TO HOUSE LATERAL SUPPORT

Guard Requirements

All decks greater than 30" above grade are required to have a guard. If you are providing a guard when one is not required, it must meet these requirements. All guards shall be constructed in strict conformance with details herein; any deviations require a plan submission.

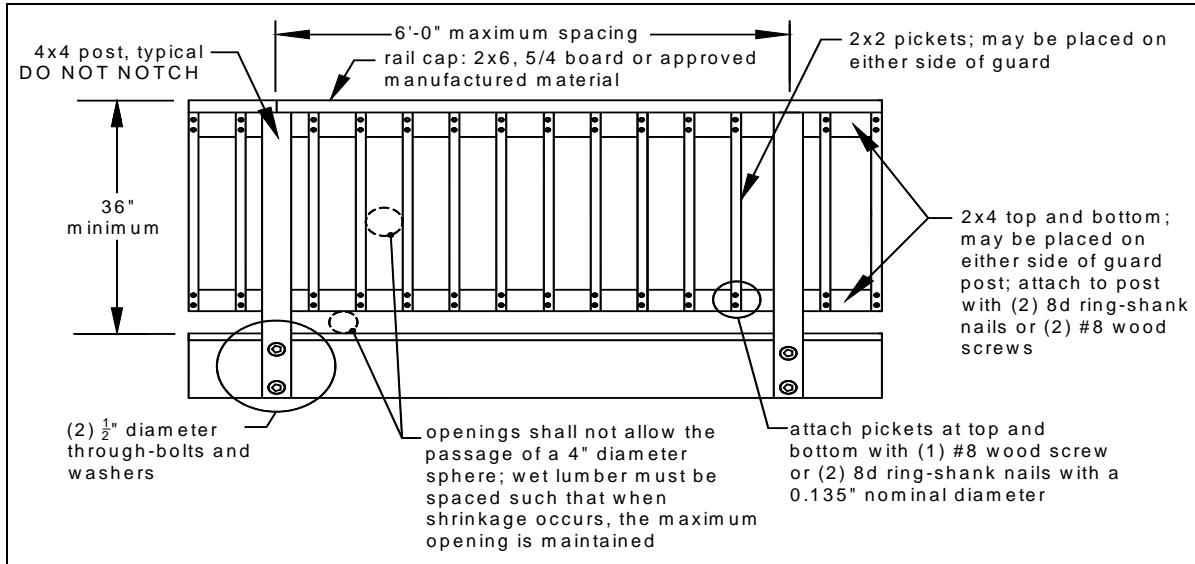


FIGURE26: TYPICAL GUARD DETAIL

Any pre-fabricated wood, plastic, composite or manufactured guard system purchased from a home center store, lumber company or similar will also require plan submission. **ONLY THOSE PLASTIC, COMPOSITE OR MANUFACTURED GUARD SYSTEMS LISTED BY AN ACCREDITED TESTING AGENCY ARE APPROVED FOR USE IN THE TOWN OF HERNDON.**

The guard cap may be composed of an approved foreign lumber, plastic or composite material provided the product has an approved evaluation report from an accredited testing laboratory which has listed the product. For a list of approved materials, go to the website below. The evaluation report must be on the jobsite and available to the inspector during the inspection process.

Any guard wholly comprised of a pre-fabricated wood, plastic, composite or manufactured guard system purchased from a home center store, lumber company or similar will require a plan submission. **ONLY THOSE SYSTEMS LISTED BY AN ACCREDITED TESTING AGENCY ARE APPROVED FOR USE IN TOWN OF HERNDON**



FIGURE 27: PROHIBITED NOTCHING AT GUARD POSTS

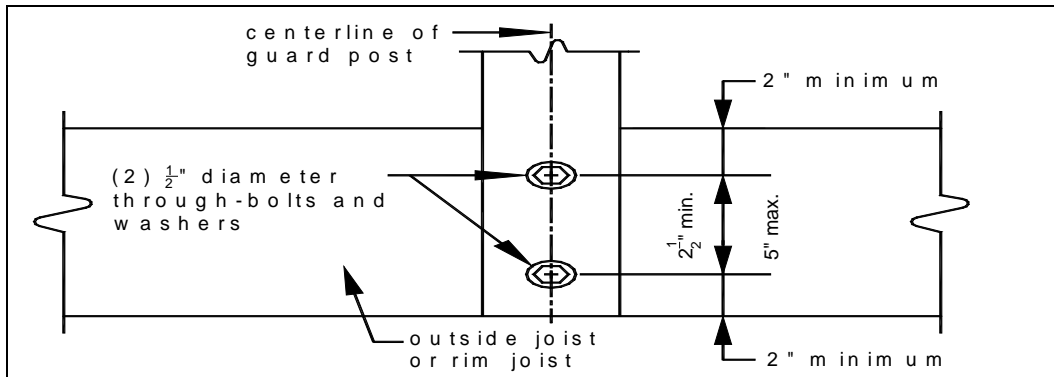


FIGURE 28: GUARD POST ATTACHMENT DETAIL

GUARD POST ATTACHMENTS

Guard posts must be securely fastened to the deck framing to ensure the entire guard can resist imposed loads. Whether a guard post is attached to the outside joist or the band joist, the adjacent framing must be strengthened with either *hold-down anchors* as shown in the attachment **Figures 29-30**.

GUARD POST TO OUTSIDE-JOIST: Guard posts for guards which run parallel to the deck joists (side of deck) shall be attached to the outside-joist using **FIGURE 29**.

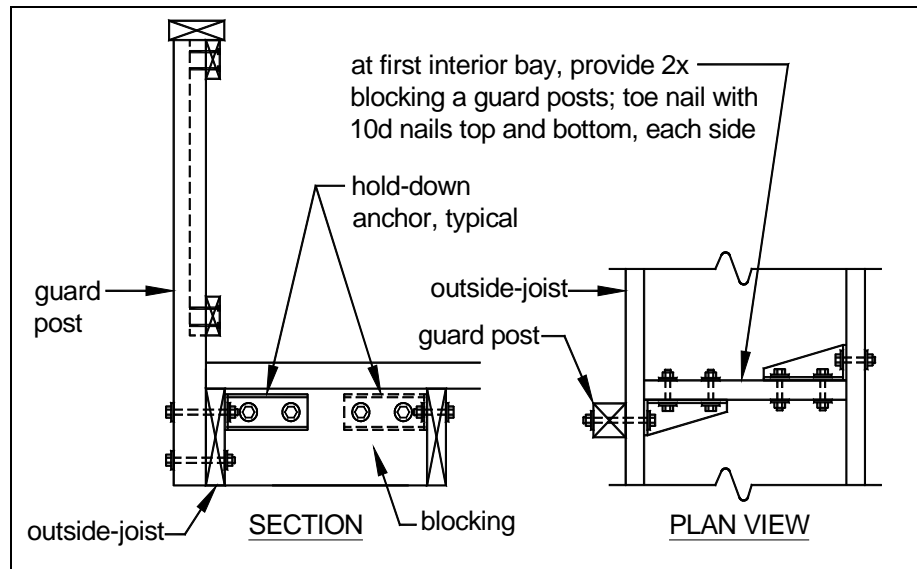


FIGURE 29: GUARD POST TO OUTSIDE JOIST DETAIL

GUARD POST TO RIM JOIST: Use **FIGURE 30** to attach a guard post to a rim joist. See **FIGURE 11** for rim joist-to-deck joist and decking-to-rim joist attachment requirements.

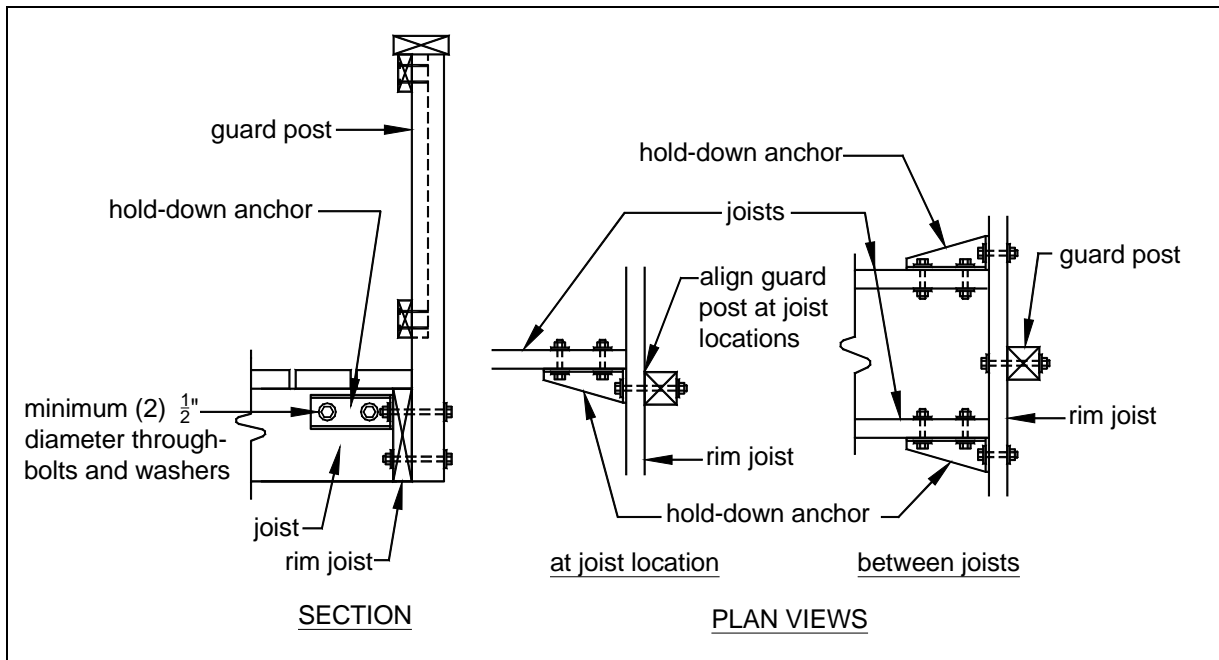


FIGURE 30: GUARD POST TO RIM JOIST DETAIL

Stair Requirements

Stairs, stair stringers, and stair guard shall meet the requirements shown in **FIGURE 31** through **FIGURE 35**. All stringers shall be 2x12. Stair stringers shall not span more than the dimensions shown in **FIGURE 32**. If the stringer span exceeds these dimensions, then an intermediate landing will be required. All intermediate stair landings must be designed and constructed as a free-standing deck using the details in this package.

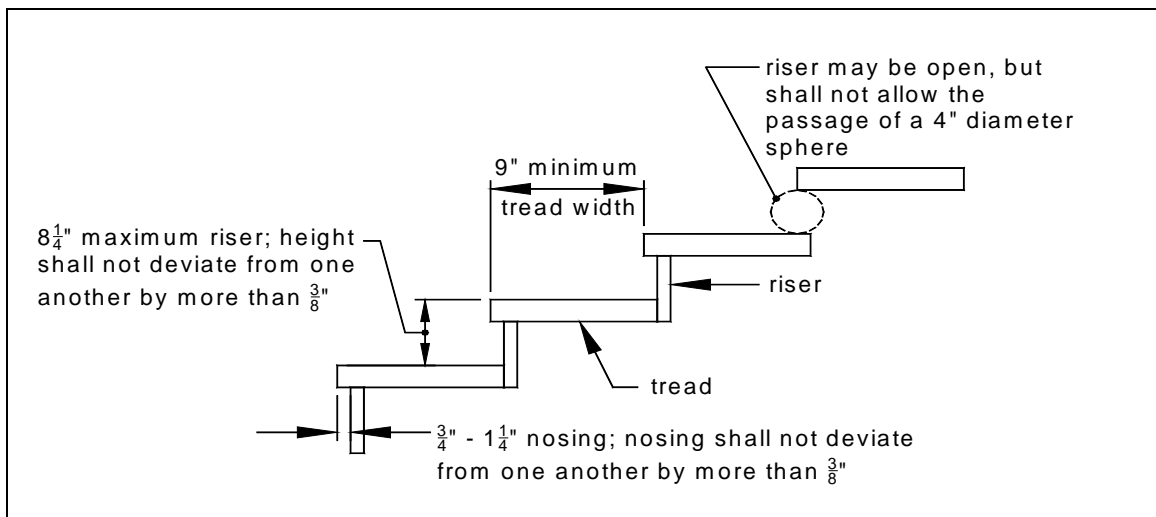


FIGURE 31: TREAD AND RISER DETAIL

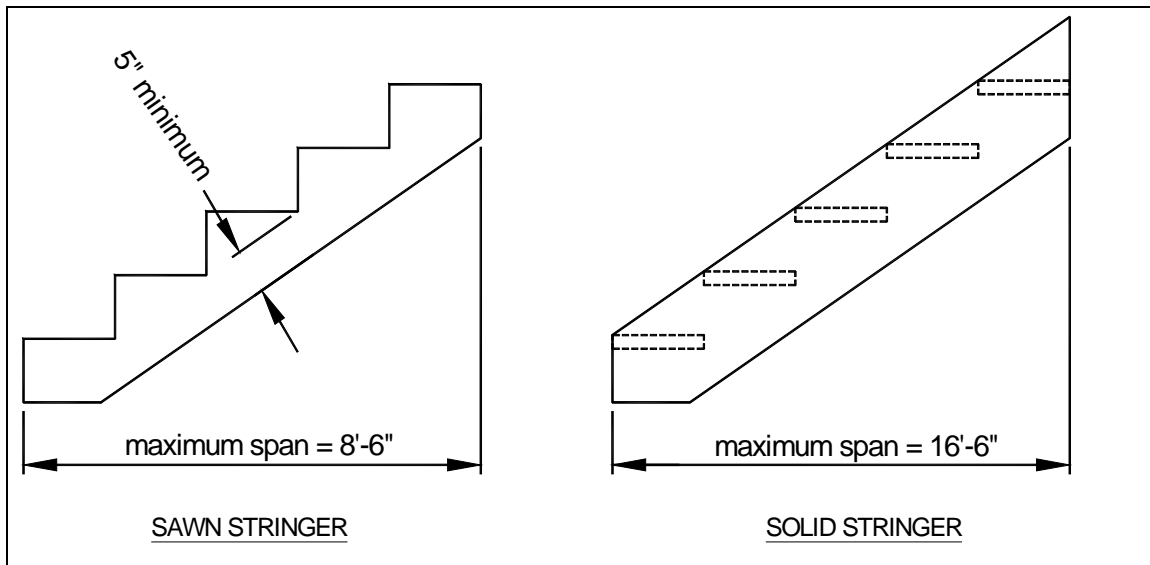


FIGURE 32: STAIR STRINGER REQUIREMENTS

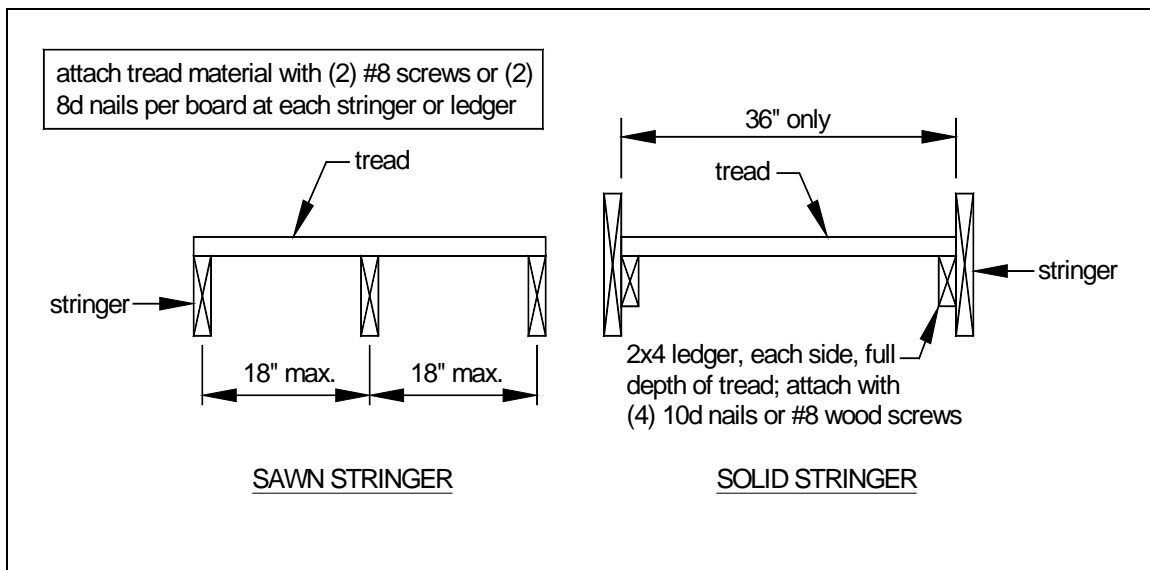


FIGURE 33: TREAD CONNECTION REQUIREMENTS

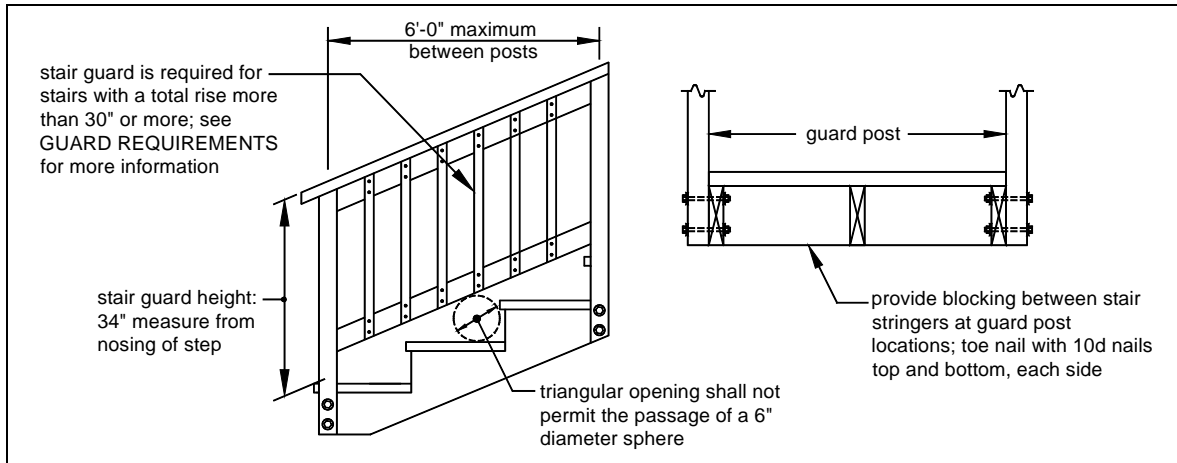


FIGURE 34: STAIR GUARD REQUIREMENTS

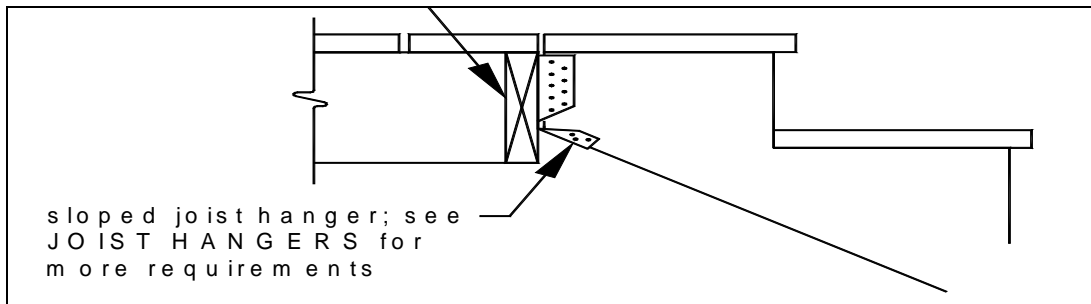


FIGURE 35: STAIR STRINGER ATTACHMENT DETAIL

SAFETY GLAZING REQUIREMENTS: Safety glazing in window glass is required when the existing house wall acts as a barrier to adjacent stairs, landings and the areas at the top and bottom of the stairs. If a window or portion thereof falls within the area shown in **FIGURE** , the glass panes within that area shall be safety glazed. Safety glazing is required to reduce injury due to an accidental impact when ascending or descending the stairs. For additional safety glazing requirements see the General Notes on Sheet Error! Bookmark not defined..

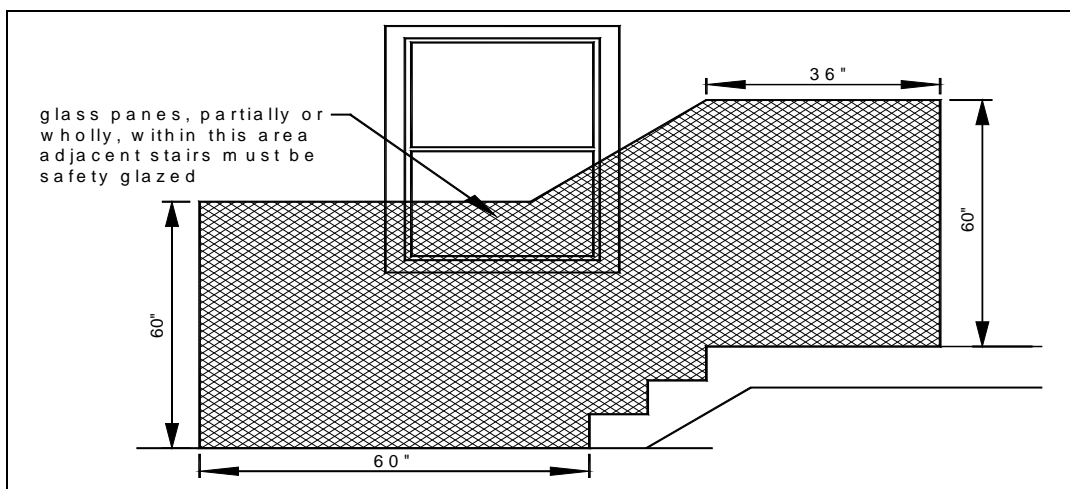


FIGURE 36: SAFETY GLAZING AREA

STAIR HANDRAIL REQUIREMENTS: All stairs with 4 or more risers shall have a handrail on one side. Handrails shall be graspable per **FIGURE 17** and shall be composed of decay-resistant and/or corrosion resistant material. Handrail shall be attached to the stair guard or an existing exterior wall which acts as a barrier to the stairs. See **FIGURE 39**. All shapes shall have a smooth surface with no sharp corners. Recessed sections may be shaped from 2x6s or $\frac{5}{4}$ board.

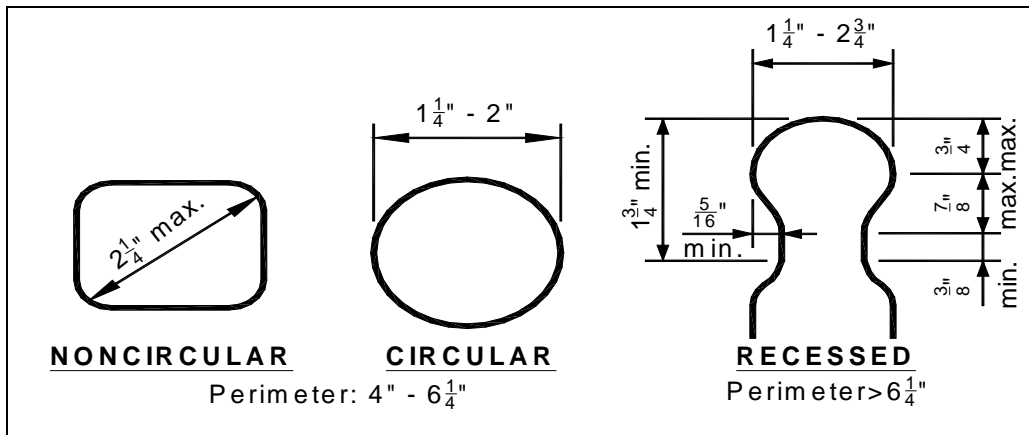


FIGURE 17: HANDRAIL GRASPABILITY TYPES/GEOMETRY

Handrails shall run continuously from a point directly over the lowest riser to a point directly over the highest riser and shall return to the guard at each end; see **FIGURE** . Handrails may be interrupted by guard posts only at a turn in the stair.

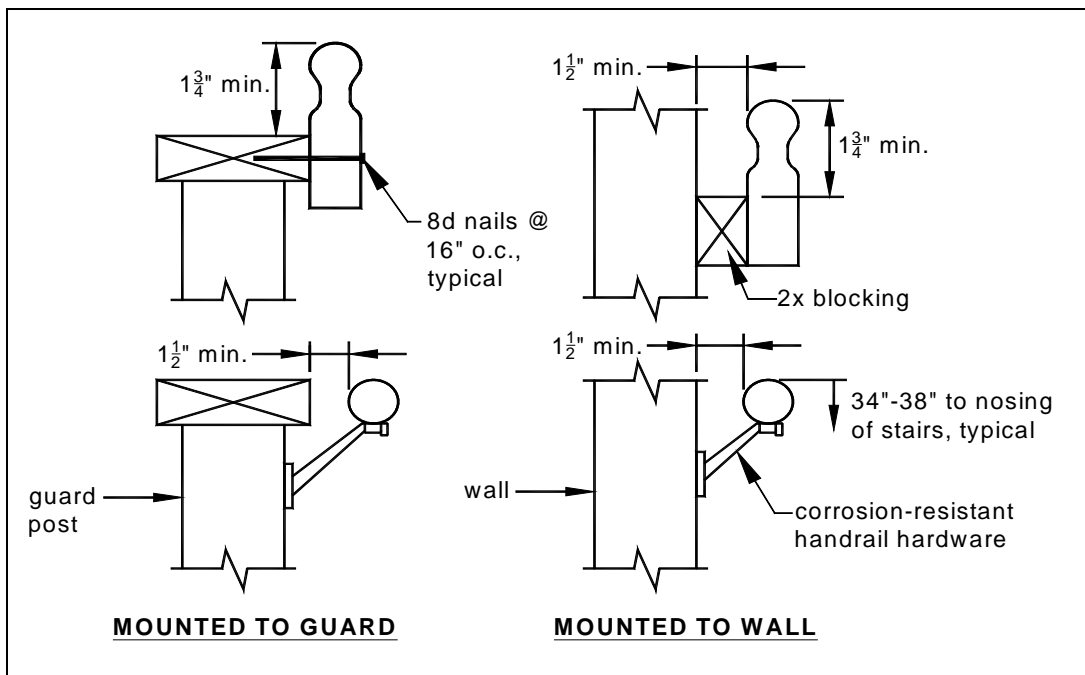


FIGURE 38 HANDRAIL REQUIREMENTS

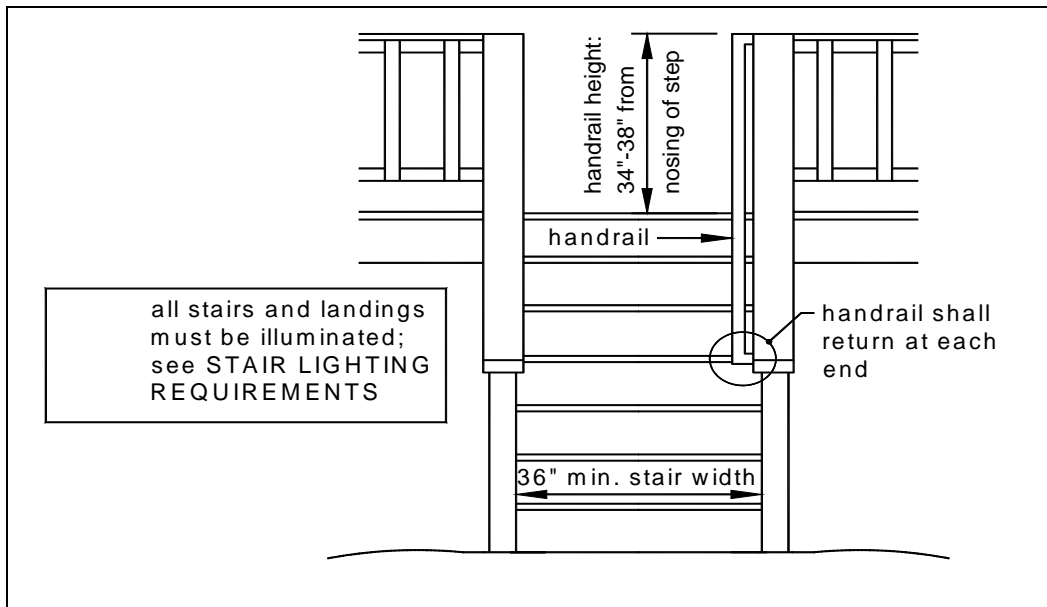


FIGURE 39: MISCELLANEOUS STAIR REQUIREMENTS

STAIR LIGHTING REQUIREMENTS: Stairways shall have a light source located at the top landing such that all stairs and landings are illuminated. The light switch shall be operated from inside the house. However, motion detected or timed switches are acceptable.

STAIR FOOTING REQUIREMENTS: Where the stairway meets grade the stair stringers shall bear on a 4" concrete pad minimum or attach to 4x4 posts as shown in **FIGURE**. The pad shall be sized such that all stringers have complete bearing on concrete and do not come in contact with the ground.

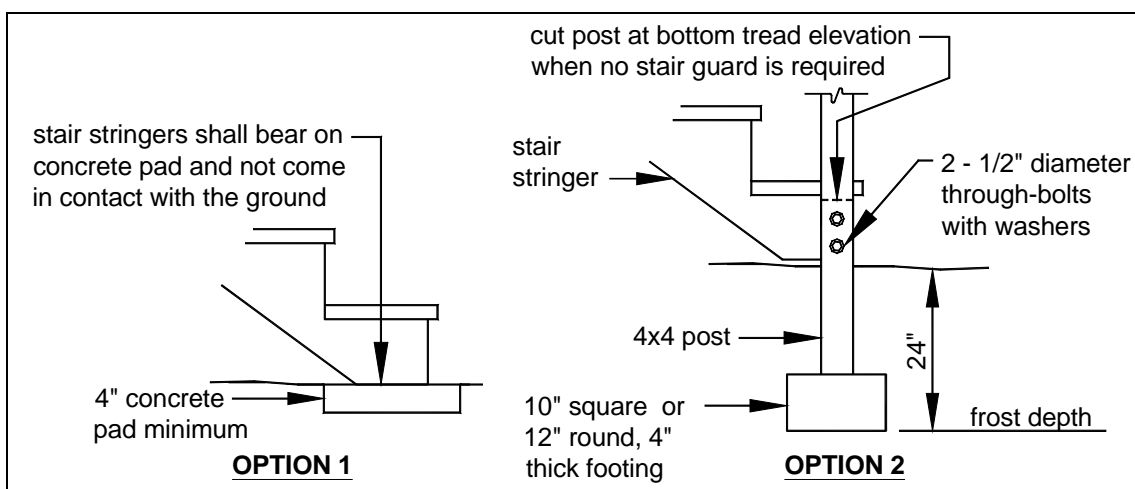


FIGURE 40: STAIR STRINGER BEARING AT GRADE

PRODUCT SPECIFICATIONS

FastenMaster

www.fastenmaster.com

1-800-518-3569

Product referenced:

LedgerLok

Hilti

www.hilti.com

1-800-879-8000

Product referenced:

Epoxy anchor HY-20

Morse Technologies

www.mtdecklok.com

1-866-617-3325

Product referenced:

DeckLok (hot-dipped galvanized)

Ramset-Redhead

www.ramset-redhead.com

1-800-348-3231

Product referenced:

Epoxy anchor Epcon Acrylic 7

Simpson Strong-Tie

www.strongtie.com

1-800-999-5099

Products referenced (in Zmax coating):

Hurricane clips

Joist hangers

Hold-down anchors HD2A

Stud tie plates SP1

USP Structural Connectors

www.uspconnectors.com

1-800-328-5934

Products referenced (in Triple Zinc coating):

Hurricane clips

Joist hangers

Hold-down anchors HD2A

Stud tie plates SPT22